



ADEOS-II Science and utilization Project Update (EORC)

**13th, September, 2005
East-West Center, University of Hawaii
Masato Yamanashi**





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1. The evaluation meeting of AMSR-E mission during the nominal phase (Three years after launch) was held on June 31th.
2. New Service
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The evaluation of AMSR-E during the nominal operation phase

The evaluation meeting was held on June,31th.

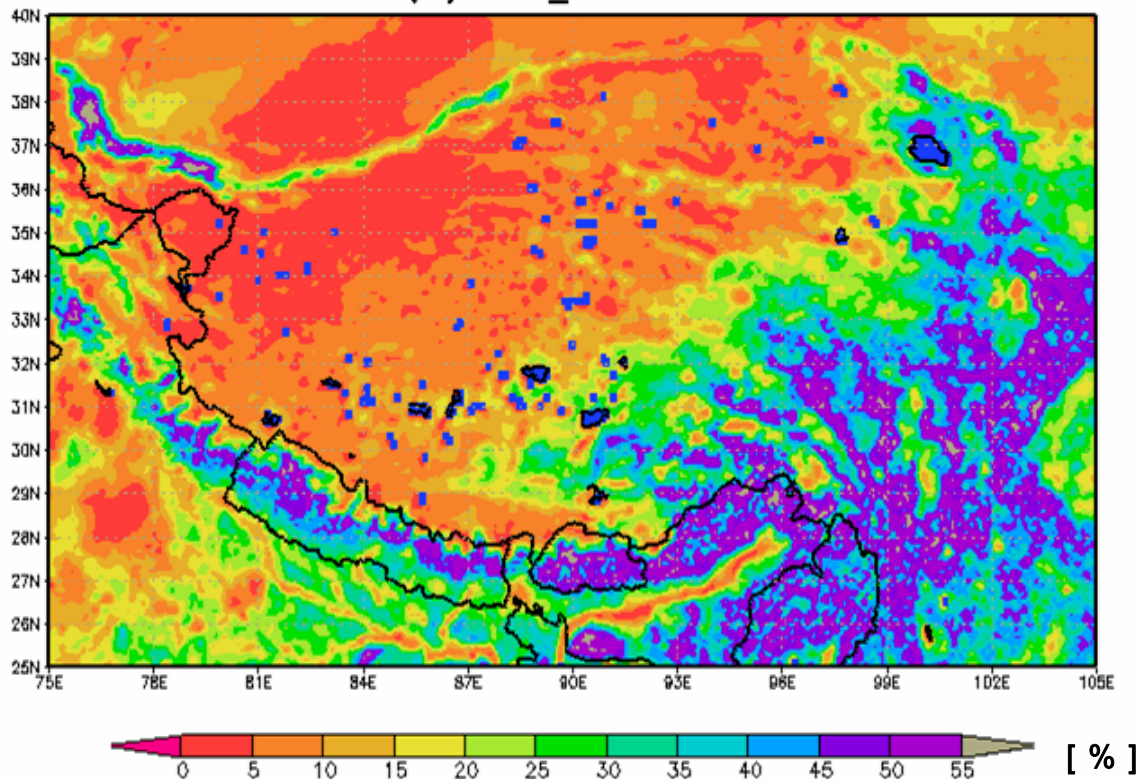
We, AMSR-E team in JAXA presented the following achievements and the plan for the post nominal phase.



Main Achievements during the nominal operation phase

By AMSR-E, we realized the global and quantitative soil moisture, all weather type observation of sea surface temperature, and the other important geophysical parameters.

6G Mw(%) tibet_D 2003SEP-last



The averaged soil moisture distribution map of the Tibetan Plateau. They identified a very clear dry-wet contrast between the northwest and southeast parts of the Tibetan Plateau.

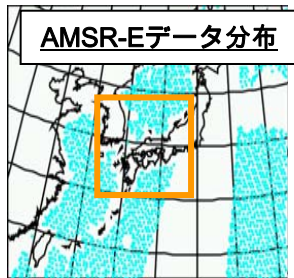
Also there are wet bands on the south and dry bands on the north slopes of the Himalayas

This is the achievements of the cooperation between University of Tokyo and JAXA



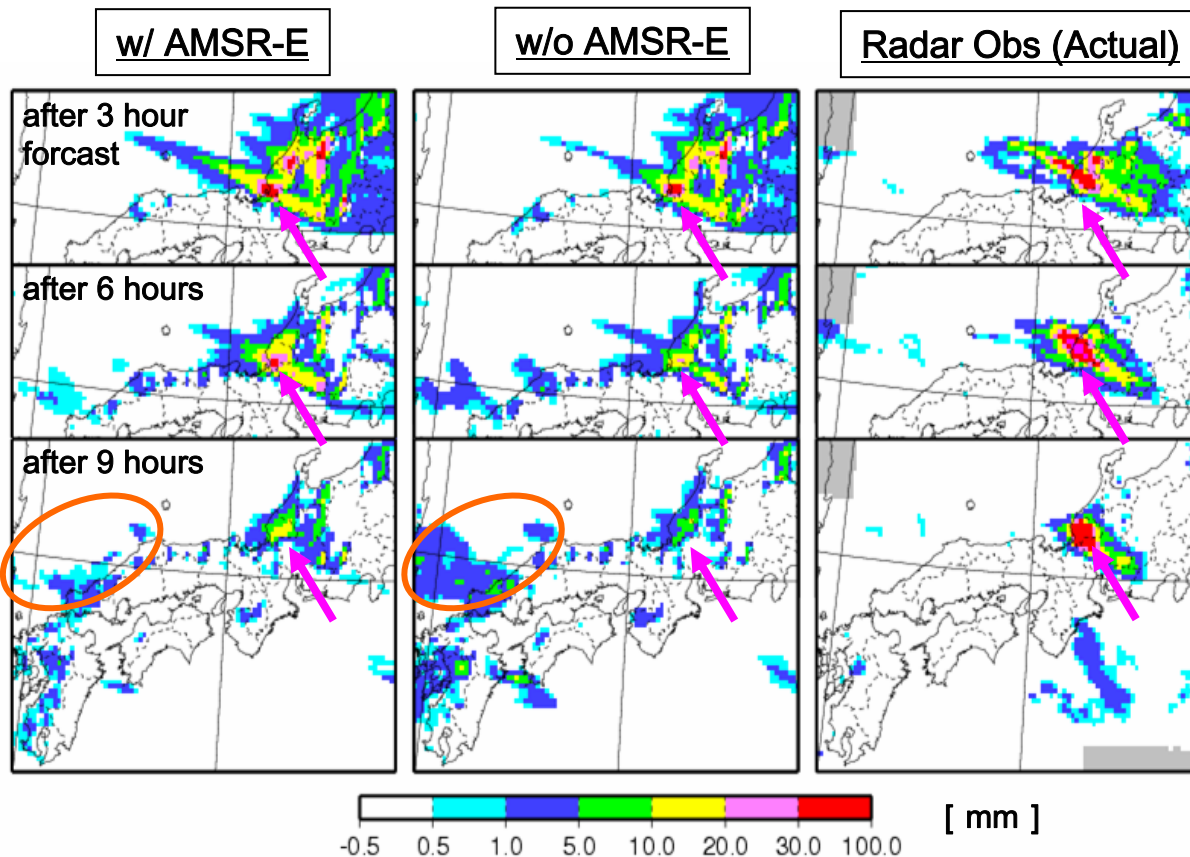


Main Achievements during the nominal operation phase



In Japan Meteorology Agency, forecasts of heavy rain improve when they assimilate the AMSR-E precipitable water data just before they expect the heavy rain to occur.

Left is the Fukui heavy rain event on July 17, 2004



With the AMSR-E data obtained around the Japan Sea and the East China sea, the forecast over Fukui area (denoted by pink arrow) predicted heavier rain, and the forecast over west part of the Japan Sea (denoted by ellipse) predicted less rain. Both agreed with the observation.

This is the achievements of the cooperation between JMA and JAXA





Conclusions of the evaluation of AMSR-E during the nominal operation phase

< Conclusions >

JAXA concluded that AMSR-E project achieved requirements of its systems specification and those of mission which define the indispensable observation for water vapor, sea surface temperature and other parameters to study the mechanism of global water, energy cycle under the cooperation between US and Japan during the nominal operation phase.

< The policy after the nominal operation phase >

JAXA will continue AMSR-E operation and the related research activities while AMSR-E is alive.





Conclusions of the evaluation of AMSR-E during the nominal operation phase (Cont'd)

The plan of research activities during the post nominal phase

1. Calibration and Validation on L1 products

The activities of calibration and validation will be necessary further. But we will use more time to evaluate products than before, therefore the pace of version up will be slow down, we will update L1 every 1.5 or 2 years.



Conclusions of the evaluation of AMSR-E during the nominal operation phase (Cont'd)

2. Update the algorithms for higher products

The following algorithms archived their target accuracy, so mainly we will maintain them.

Water Vapor

Cloud liquid

We will improve the following algorithms. And we will update algorithms every one or two years.

Sea surface temperature

Sea surface Wind

Precipitation

Snow Depth

Soil Moisture

Sea Ice Concentration

And to improve algorithms, we will continue to support the following field experiments

Soil Moisture

Snow Depth

Sea Ice Concentration





Conclusions of the evaluation of AMSR-E during the nominal operation phase (Cont'd)

3. About another research activities, such as applied research, joint use, climatic variation and future mission
 - Now we invite the new PI for these scientific fields.
 - > Review will be soon finished and we will start new contract soon.
(Probably from the beginning of October)
 - AMSR-E project member will cooperate with the other project, such as GPM, GCOM, the follow-on mission projects.



Online new Service

JAXA will start new **service**.

To dedicate Earth science, JAXA will provide researchers the following satellites data with free of charge.

- TRMM PR
- ADEOS-II GLI
- ADEOS-II AMSR
- AQUA AMSR-E

By only registration (without troublesome contract), user can get them through internet .

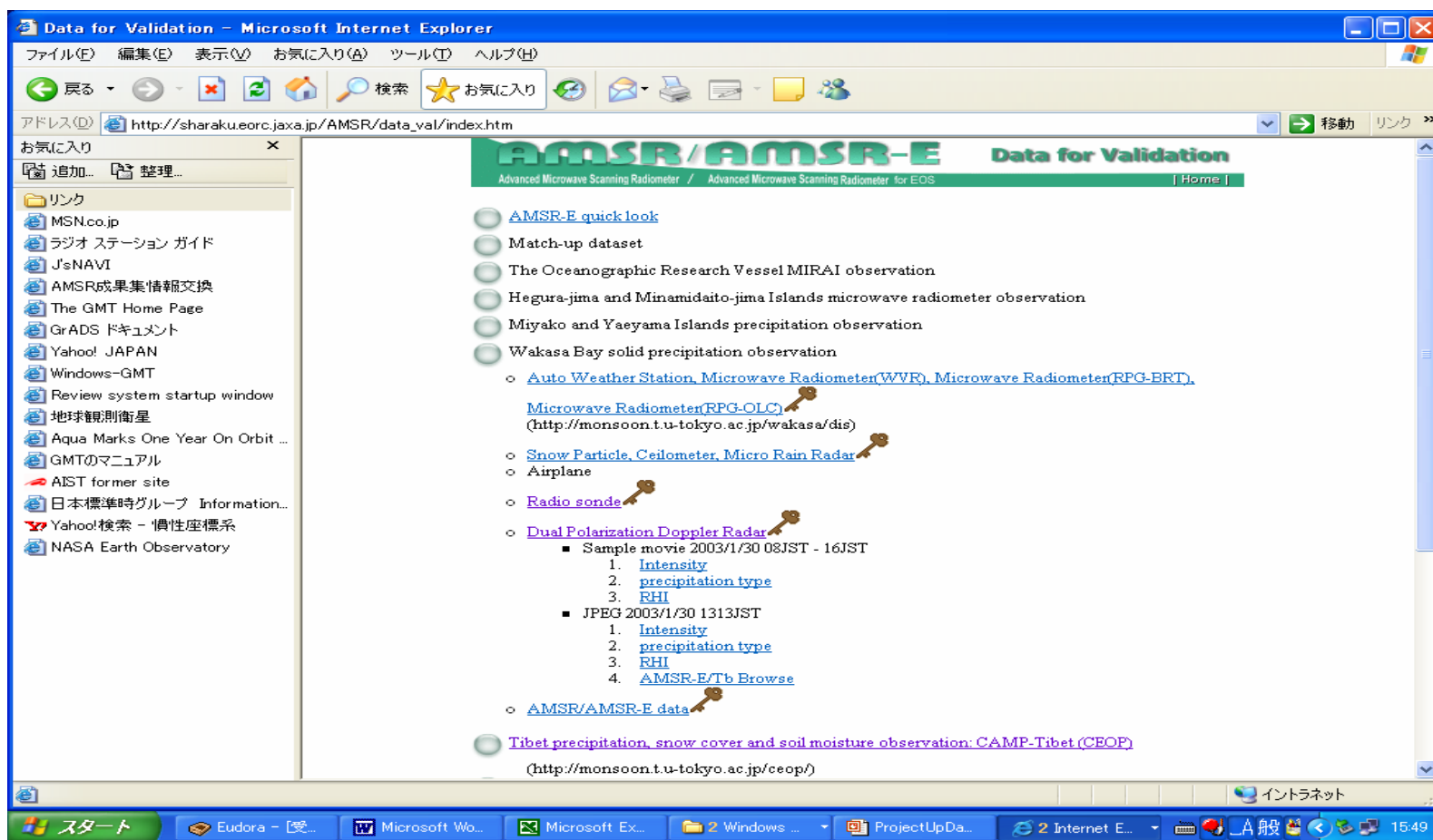
This service will be soon available. (from the beginning of October ?)





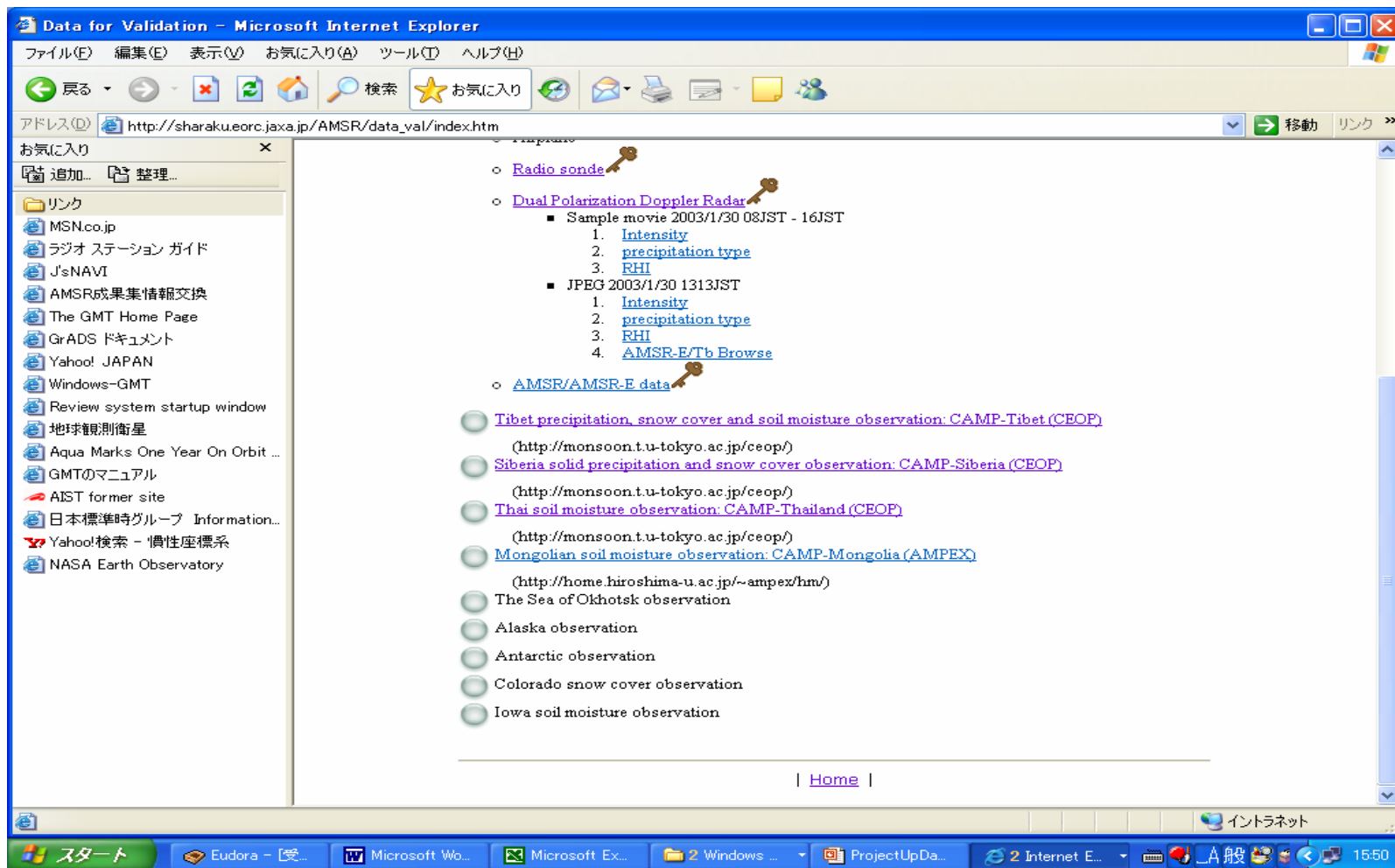
The homepage of the validation data

As already announced, we open the validation data to PI to share.
The following (the available data are shown in blue character.) is home page of it. Address is http://sharaku.eorc.jaxa.jp/AMSR/data_val/index_j.htm





The homepage of the validation data (Cont'd)





Booklet

Title

Improving our Understanding of Climate Change

For high school or University students, this is to introduce the latest achievement of AMSR-E/AMSR Research activities written by Japanese Pl.



気候変動の
解明に向けて

AMSR/AMSR-Eによる
水惑星観測
Observation of Water Planet by AMSR and AMSR-E



Further information
contact:
yamanasi@eorc.jaxa.jp

Toward the Understanding of the Climate Change





Schedule of this fiscal year

- Workshop (Algorithm comparison + to report the status of research)
+ A M S R - E 3.75 years Anniversary + ADEOS-II 3 years Anniversary(?)

Plan : - Next January

in the third week (from 16th) or in the forth week (from 23rd)

- Near Tokyo -> now we are looking for the conference rooms.
- Agenda (plan) 4days

The first day (AM) : ADEOS-II 3 years Anniversary (?)

The first day (PM) : AMSR-E 3.75 years Anniversary

- Opening remarks by JAXA HQ
- Speech by NASA people(?)
- Speech by Japanese Scientists
- Speech by U.S Scientists(?)
- Introduce several achievements by Japanese and U.S

from 2nd day to 4th day : Reports and exchanges information as usual.

- Version up : Next February , Higher products only.





We express our thanks for the cooperation of U.S science team, ground systems groups, and other related people to achieve AMSR-E missions during nominal phase.

We hope to keep the cooperation during the post nominal phase, also.

